

ABSTRACT

A radar that can detect target azimuths located outside and adjacent to a scanning angular range of a beam is provided. For this purpose, the radar determines changes in received signal strength (a signal-strength profile) in the azimuthal direction as a function of a beam azimuth in a predetermined scanning angular range, and estimates the target azimuth causing the signal-strength profile from the signal-strength profile, which is part of a convex located adjacent to the outermost angle in the scanning angular range. For example, the target azimuth is estimated by a ratio between the received signal strength at the outermost angle of 10.0° and the received signal strength at 9.5°, which is one beam inside the outermost position.